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# The Character of Psychology

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THERE is a striking similarity between the progress of a - science and the growth of a human being. Each has a ng period of existence before arriving at that stage of delopment which may be termed the period of intense selfalysis. At that time man begins to search out his own culiar abilities, evaluate his own importance and rightful dependence, and consider just what is his raison d'être. hus also does a young science concern itself about the eories upon which it was founded, about its formal eject, and its principal methods and problems. It is posple for man at this period of life to cause a crisis inous to his soul, a crisis withal containing the possility of a richer, stabler personality. Carrying the analy to the end we must admit that this period of selfalysis in the development of a science is as likely to ork for its ruin as for its perfection.

Modern empirical psychology now seems to be in just sch a period of transition. Even during the last decade is period of flux was regarded as the "Crisis of Psycology." Now the question is, how was this crisis bought about? How did it influence psychology and its velopment? Has it proven a detriment or a boon to the sence?

#### I. The Rise of the "Crisis of Psychology"

As is well known, modern psychology originated at a me when the natural sciences were in a state of great ogress and in high repute. By the use of the exact meth-semployed in the natural sciences, G. T. Fechner hoped come to a better understanding of the soul's life and its relations to the body than seemed possible by illosophical speculations. He became, in 1860, the under of Psychophysics. For at least ten years after chner, the methods and schematic theories of the natural ences formed the prototype and ideal of the New ychology.

In this, then, lay the strength as well as the weakness

of nineteenth-century psychology. Its strength: From the school of the natural sciences, psychology once more learned the importance of careful and methodical work for which the preceding Constructive Psychology of the romantic philosophers had certainly not distinguished itself. By means of scientific methods psychology produced results that made for solid foundations of psychological investigation, even though it gave rise to investigation of those very foundations.1 But on the other hand, this "Natural Science Psychology" had its quota of weak points: First of all it attempted to explain the activities of the soul according to the scheme of the chemical Atomists, that is, by going back to ultimate, indivisible, and identical elements of nature, and theoretically building the soul out of these elements. And, as is necessarily expected at the beginning of an investigation, it dealt with these "psychic elements" in a somewhat awkward fashion.

Psychology, however, would prefer to explain man in toto, and as a result there came into conflict with the official psychology, the reaction of Psychoanalysis. A further reaction followed in the form of "Thought Psychology" (Külpe, Bühler). Then came "Gestalt" Psychology and Spranger's "Mental Science" Psychology. Last but not least there arrived Behaviorism and all the Structure Psychology and Characterology of modern psychologists and psychiatrists. These different aspects of psychology had gradually adopted such a variety of principles and such varied views of their subject matter and problems, that, as Bühler wrote in 1927, one must speak rather of many opposing psychologies than of one definite science of psychology. Thus was psychology brought to a self-rending crisis.

#### II. The Crisis of Psychology

The question now presented itself: Is an empirical science of psychology possible? How can it be brought about? After exciting much discussion, this question

became seriously acute. But it was not an entirely new one. A negative answer had already been given to it by Kant, the Prince of Criticism, and by Comte, the Prince of Positivism. Again, towards the end of the nineteenth century, the French Positivist, Richet, prophesied in the spirit of Comte: "Just as metaphysics will soon die out so also will psychology cease to exist as an independent science, and will be absorbed by physiology." It did not seem at all vain, under those circumstances, to doubt the practicality of psychology and to consider it, with its grand display of laboratory devices, a mere pseudo-science.

Traditional psychology is based on experimental knowledge and must proceed from immediate personal knowledge of the soul's activities. This is so because no one can examine at first hand another's psychic experiences. But does not even the true nature of one's own soul-life escape personal observation? Does not, for instance, the strongest fit of anger subside as soon as one sits down in his armchair at the club, or at his bench in the laboratory, to concentrate on and systematically study his emotion? It was the purpose of modern psychology to discover universal laws of the soul-life so that they might be made applicable to each individual soul. But every soul has its own peculiar activities and no two can be truly alike. How then would it be possible to formulate laws that would apply not only to two individuals but to all men, or even to all men of a given group?

Modern psychology, appearing as an experimental science, borrowed the experiments of the natural sciences. Now it is characteristic of the scientific experiment: (a) that all qualified investigators be able to control and reexamine each other's experiments; (b) that the processes to be examined be procured arbitrarily; (c) that the various details of the experiment be altered arbitrarily. These conditions, however, cannot be fulfilled with precision even in a simple "association" experiment. For instance, the formation of an association of nonsense syllables does not depend solely upon the number of readings and the similarity of the things associated, but also upon the subject's interest, which cannot easily be produced or altered at will. And it is with still greater difficulty that the higher processes of the soul-life are recalled and controlled. Thus an experimental psychology in the form of a science, subordinated to laws that resulted from personal observation, seemed an impossible, even a false science.

There now ensued a search for other forms of psychology, especially for one with a different formal object and with different methods of procedure. Such was Russian "Reflexology." It was based on the most radical (but most logical) conclusions drawn from the first principles of Comte's philosophy and from the Comtian refusal to acknowledge a psychology advocating personal observation. This Russian Reflexology fulfills to the letter the prophecy of Richet. Bechterew was the theory's chief exponent and did much to popularize the name. But it was Pavlov who substantiated the early utterances of

Bechterew. By his numerous experiments he was able to show how training, in connection with natural reflexes causes an abundance of complicated conditioned reflexes.

Unfortunately, a theory was constructed upon thes experiments for which the actual evidence was much too scant. All the activities of man, his thoughts and desires knowledge and skill, were now supposed to be explained as a complicated system of conditioned reflexes. Indeed Pavlov maintained that thus could be obtained "the true and final triumph of the human soul over its highest and a knowledge of the noblest undertakings . . . . mechanism and laws of human nature," and from all this should flow "the true and certain happiness of man." The expectations of Bechterew were nowise different. Hi claimed that the time was not far removed "when the most delicate and complicated assertions of the humar personality . . . . will be studied according to Reflex. ology." Finally the official Russian Press Service contributed the preface to the third edition of Bechterew's masterpiece on Reflexology in which it extolled his work as the consummation of Darwin's spiritual revolutiona revolution which had already given the death blow to the metaphysics of the soul. It was held to be the finishing touches to the period of compromise—the fifty years following Darwin—during which a so-called Empirical Psychology was still carried on and psychical processes were not yet démodé. In so far as Reflexology attempts to replace psychology it is obviously adulterated materialism.

More successful than these were two further kinds of "objective" psychology, Behaviorism and Mental-Science Psychology. Since it is so well known, Behaviorism need hardly be discussed here. In its method, by means of an imposing array of investigations as exact as the natural sciences prescribe, Behaviorism realizes the ideal of an entirely objective and controlled experimentation. Hence its limitations in the actual observation of reactions. In its theory it subscribes to the idea of totality which is so fondly discussed in modern psychology. With the exception of a few exponents it treats of the soul-life, not according to the Atomists' theory, but as a living whole reacting in its entirety to a whole situation.

The psychological interpretation of behavior naturally supposes internal experiences which are not known by external observation, because only the person who is experiencing them knows what his thinking, grieving, and desiring are. Under this supposition Behaviorism presents an absolute theory for all those departments of psychology in which the requirements of personal observation cannot be met, for example, in Child and Animal Psychologies, and likewise in some problems of Adolescent Psychology. It also offers worthwhile assistance in other departments of psychology.

Objective psychology is very different as found in the so-called Mental Science Psychology of Edward Spranger. It presupposes that our thoughts and desires always tend to something outside ourselves, to "objective" values such

truth, goodness, beauty. In all our spiritual activities are in relation with a world of spiritual values. Therere, in the conclusion of the Mental-Science Psychologists. can fully understand human thoughts and endeavors ly when we consider them in their relation to these partmental values, and when we consider the proper bjective element of the soul's activities in connection with e proper element of their objective values. Psychologists aploying scientific experiment are criticised by Spranger, ho admits that many interesting relations of the body d soul as affecting the senses are revealed by these experients, but denies that we are brought by them to a better derstanding of man's spiritual life or of his spiritual rsonality and characteristics. For this reason he not ly opposes Mental-Science Psychology, which bases its owledge on mental associations, to the scientific search r causes, but even demands that only the latter be desnated as psychology. This demand made so strong an pression that no less than four discussions were held the matter at the International Congress of Psycholosts which convened in 1926 at Groningen, Holland.

Of course, there operated alongside these various "objecte" psychologies, the traditional psychology, based on a analysis of consciousness. So there had at length been ablished a series of opposing psychologies that differed eatly from one another in their principles, methods, and eories. Because of the "reflections" it had made upon self, psychology as a science seemed to have lost its unity. The Crisis of Psychology threatened to become its ruin.

#### III. Psychology Finds Its Way Out of the Crisis

Karl Bühler of Vienna, sometime exchange professor Harvard University and Johns Hopkins, proposed a nthesis of these diverging tendencies. He had matured der traditional psychology, based on the analysis of nsciousness, and being one of the early pioneers of hought Psychology, he was especially skilled in personal servation. His sojourn in America and the extensive rearches of his School of Child Psychology had given a familiar knowledge of the methods of Behaviorism. a Thought Psychologist he had a natural leaning wards the study of "psychic association" and "objecte spiritual values." He was indeed the one most capable offering a synthesis.

Although immediate empirical knowledge of psychic pocesses can be had only by a glimpse into one's own terior self, these processes are manifested indirectly by ternal behavior. They confine their activities to the ul itself but generally aim at something objective, a insition, as it were, from spiritual experiences to spiritual lues. Because of this antithesis in the life of the soul, ferent methods may and must be employed to arrive a correct understanding of the soul; (a) objective servation for uniform behavior, (b) data of the mental sences for important association of psychic processes and pir field of values, (c) self-observation as the truly ndamental method whenever there is question of direct

knowledge about permanent psychic states, and the psychological interpretation of these states objectively observed.<sup>3</sup>

Thus, we have in reality one psychology with three "aspects." As Bühler has said, psychic processes as such are immanent to the soul and can be perceived by the intellect only. By behavior, however, they externalize themselves and come into contact with the world of values. The three aspects of the methods of psychology are, the analysis of consciousness, the analysis of behavior, and the mental-science knowledge of the psychic processes. These three methods must make up for each other's deficiencies by mutual co-operation.

#### IV. Results of the Solution

After solving the problems brought on by its period of crisis, psychology took on an entirely different character from that it had presented in the first decade of modern psychology. The earlier experimental psychology tended to become solely and entirely a natural science. Thought Psychology did not fit very well into the scheme of the natural sciences for its concept of the psychological experiment no longer coincided with scientific experiment. The utility of a system that could reach the spiritual life of the soul seemed of greater moment than the unqualified support of a scientific prototype. Considered under the triple aspect, psychology is neither a genuine natural science nor a genuine mental science. It is both, or it may be preferable to say that it is neither, for it is something independent of both, using alternately, according to the peculiar nature of circumstances, now the methods of the mental sciences, now those of the natural sciences.

Thus out of the "Crisis of Psychology" there is developing a thoroughly unified, circumscribed, but at the same time, a richer psychology. It is to be hoped that this psychology will succeed in throwing ever more light, as far as this is possible by means of empirical investigation, upon the wonders and secrets of man's soul.

#### NOTES

- <sup>1</sup> It is therefore manifestly unfair of moderns to speak scornfully of this early psychology. One cannot hold a vigorous youth blameworthy simply because he has not yet reached manhood and intellectual maturity.
- <sup>2</sup> A well known example of this method is the following: A dog is trained to take his food while a bell is being rung. After a while the mere sound of the bell causes the secretion of gastric juices in the stomach, which prepares for digestion even when no food stimulants influence the animal's sense organs.
- <sup>3</sup> Comte's reproach, that self-observation does not reveal the life of the soul as it is, is so sweeping that it must be considered an unproved assertion. If reflection does not comprehend the entire life of the soul, it does, nevertheless, reveal a great deal; and if we may not trust reflection at all, then all certainty of knowledge is gone. Of course, reflection does not reveal everything that modern psychology desires to know of man's personality.

## The Tragic Theodicy

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BOTH to the poets who have created high tragedy and to the critics of all eras who have thought deeply about it, its proper matter has always been that involved in some aspect or other of the Problem of Evil. In the theorists this is clear, from Aristotle down through what faint consideration tragedy was given in the Middle Ages, through the Renaissance in all lands, through the Reformation in some, through Cartesianism and Rousseauism wherever they penetrated, through English and American thought, to the twentieth century. Among the writers of tragedy the same unanimity has prevailed, from Aeschylus to Eugene O'Neill, from The Suppliants to Days Without End. All have recognized that to be human means to yearn for happiness; and implicitly at least that tragedy is the quest of poetic insight, in so far as insight may be gained, into the riddle of high interference with human happiness.

In any consideration of the Problem of Evil, and therefore in tragedy, there is involved a theodicy: an attempt to penetrate the ways of God with unhappy mankind; a poetic exploration of human disappointment overhung by an Omnipotence that yet must be friendly; a wistfulness to reconcile in mortal vision, if it be possible, distant Divine Goodness and its permission or direction of instant human mishap; an intense effort of poetry to fuse these two factors together into one heightened picture of satisfying color, light and shade, proportion and perspective. There is no question here of a clear-cut solution of the riddle—if that were possible tragedy would be shorn of most of its fascination and beauty; its only use would be its brief, poetic refreshment of a known answer that conceivably might need occasional rehearsal by short human memory, clouded ever anew by the turmoil of sublunary things. Intellectually, tragedy at its best does for man regarding the Problem of Evil what philosophy does for him regarding, for example, the Trinity: shows him the non-repugnance to reason of a mystery that it cannot explain. Emotionally, it is evident, the effect in each case is quite different, owing to the intimate human poignancy of the materials of tragedy's mystery, as well as to the poetry of their exploration. The tragic process has not been described better than in Professor Macneile Dixon's fine saying: "the spirit of inquiry meets the spirit of poetry and tragedy is born."

As an immediate corollary of what I have said, it follows that for true tragedy the elements of the Problem of Evil must be truly conceived; and that the satisfactions of tragedy are valid only in so far as the poet's concept of these elements is true. Departure from truth, false or incomplete assumptions regarding the constituents of the riddle, are the enemy of high tragedy. If one of these

factors is falsely presented, then both the poet's and the spectator's experience is false; if the problem as put is artificial, fashioned however sincerely by the poet, then the experience of his tragedy is artificial; if truth is presented incompletely, then the tragic experience is incomplete, something has been withheld from the spectator, he has been arrested this side the ultimate reaches of tragedy. And in that measure—and more—the art of the traged is false art. The tragic theodicy must be discriminating indeed.

The mind of man is puzzled by evil of two kind chiefly, each of them a thwarting of human desire through the removal from man, or the refusal to himhis privation in some way—of a perfection or develop ment that is due to him. They are physical evil, a privation which mars man's completeness or hinders his prope activity: in a word, pain of body or soul or of both; and moral evil, or the disorder involved in the departure of human free will from the moral law together with the acts that result from such disordered will: in a word wrongdoing. Essentially negative both, these two kind of evil are positive in their disturbing, discordant effect it the harmony of things. In both, thinking man sees with bewilderment nature-rational and non-rational-at wa with, thwarting herself, and sees himself shorn of felicity Regarding what evil is, thinkers of all ages have been in substantial agreement. The Problem is not here. Regarding why evil is, they have parted company sharply this has been indeed the "punctum pruriens of metaphysics." And imbedded in its heart has ever been the knotty problem of human conduct.

This double aspect of the Problem of Evil (why und happiness should exist, and how man should act to be happy) the poets of successive ages have woven into the fabric of tragedy. Not always, however, with the same effect: for the puzzle of high interference with human well-being has, to the peoples of different ages, and to different peoples of the same age, presented itself in vary ing fashion. The variation has been due, not to an internal evolution in the problem itself, but to an evolution, by addition or subtraction, of human knowledge of the problem's elements. The clouds that since the beginning have on all sides dimmed its features for observing man have risen and settled again, thinned on this side to thicken on that, begun here to scatter only to gathet there once more, without ever wholly yielding their secret, But the tragic poets have never abandoned, nor need they ever, as long as men and poets endure, abandon their high quest.

I have referred to Professor Dixon of Glasgow, whose Tragedy, first published nearly ten years ago and often

imy hands from that day to this, I consider the most the in many ways, and in some the most essential ricism of tragedy that has appeared in print these many its. So much of what he says is well said that it seems grateful to differ from him: I do so here in a minor int. Somewhere he calls the drama of Greece the earliest servatory that opened to human gaze the moral and agious problem of tragedy. Though elsewhere concuss of the legacy of Israel to tragic drama, he seems to overlook that earlier observatory, the Book of Job. ter an epic age richer than the Greek with the riches of

Pentateuch—Creation, the Fall that brought death o the world, and all our woe, the Deluge and Babel. raham, Isaac and Jacob, Egypt, Pharaoh and Moses, the d Sea, the desert and Sinai, and the Ark of the Covent; an age rich with the epic wealth of the conquest of Promised Land, the wars, the recurrent apostasies and ir punishments, popular repentances and deliverances ough Judges and Kings—Saul, David, Solomon—the and fall of the temple, the years in Babylon and their It, the rebuilding of Jerusalem; an age further enriched idylls like those of Ruth and Tobias, and episodes like se of Judith and Esther-after such an epic age comes the Hebrews the formal "emergence of mind" (as Prosor Dixon describes Greek tragedy) in the theodicy of b. Here is a poetic-dramatic observatory earlier than Greek, one that penetrates more deeply and truly than Greek into the unfathomable firmament of the Probn of Evil. Job first, and in dramatic spirit, scans the evens from a world of men thwarted of happiness, with vinity brooding dove-like on the vast scene made somew strangely pregnant with woe. Here human disapintment, especially that of the upright, is brought into light of the Providence of God, is found to be not variably the punishment of sin, often indeed a test of tue, a proof of God's love. But great mystery remains: ehold, God is high in his strength, and none is like him ong the law-givers. Who can search out his ways?" xxvi:23-24)

Unaware of this earlier exploration, the Greeks had it to do independently and under the handicap of the meric pantheon. The mother of a people who were w to scrutinize the gleaming, all-too-human gods she we them, Greece mothered also an aristocracy of mind Fore which that pantheon eventually crumbled, either death in scientific materialism, or to new though still pping life in the notion of a monotheistic Supreme ing not wholly divested of the humanity that had thed its predecessors—a Zeus to whom the man who e above his fellows was an object of envious attention of just retribution. Such, in contrast to the gods of omer, was the divinity of Greek tragedy as it emerged m that aristocracy of mind become vocal in the throats the tragic poets of Greece. A divinity supreme, yet t quite so, perhaps; since behind it lurked uncertainly shadow of a great Necessity to which even godhead med subject. Beneath this firmament man moved

freely but precariously, for the Attic heaven was jealous of human prosperity and righteously on guard, armed with the great rule of moderation in all things, a rule that was to the Greeks at once the hedge of divinity and the formula of human felicity. Their tragic poets were acutely aware of the human yearning for happiness, and of its too frequent, unexplained frustration beneath the canopy of overhanging, overseeing divinity. Their poems embody their theodicy.

It was hampered by certain limits: by the Greek confusion of ethics with aesthetics in the quest of happiness; by their preoccupation with this-worldly happiness to the neglect of any deep concern for that of the next world, an incomplete apprehension of human destiny; by error and defect in their concepts of divinity, humanity, and the relations between the two. But these tragic writers wrote sincerely and with fine artistry—they were poets; so that even with limitations their achievement was magnificent, their poetic penetration of the everlasting puzzle a creation of arresting beauty. This was a result made possible by their "profound sense of God and their vivid sense of man," and the consequent theodicy of their tragic plot. For from these elements is high tragedy distilled, as Aristotle, looking on their work, clearly saw, interpreting that vision in his well-known judgment: "We maintain, therefore, that the first essential, the life and soul, so to speak, of tragedy is the plot." Perhaps the greatest single disservice done to high tragedy since his day has been the gradual desertion, by critics and playwrights, of this pronouncement. Certainly Shakespeare, upon whose work chiefly the critics have founded their rejection of the ancient view, would have suffered their heresy without sharing it. Greater than the Greeks as creator of character, he was not for that their inferior in awareness of the supremacy of plot. It is the world's misfortune (and Shakespeare's) that criticism, captivated by the first perfection, has overlooked or denied the second, abetted in its partial view by the poet's gentle accommodation of his clear sense of high tragedy to the secular temper of a secular age, an accommodation achieved by not obtruding on his stage a supernatural theodicy. To suppose its complete absence from his thought is to dishonor the intelligence of the poet he was.

For between the Greeks and Shakespeare a great thing had intervened: the sublime marriage, in the thirteenth century, of the Hebrew-Christian tradition of divinity and humanity to Greek truth, in the Summa of St. Thomas Aquinas. In the Scholastic theodicy the mystery of the Problem of Evil persists, some of its Greek mists dispelled, but not all. The mystery is rarefied and intensified; the materials of tragedy are still there, and better than before, because now they are true. And just as the tragedy of the Greeks is unintelligible without an intimate knowledge of their view of religion, so modern tragedy after the Summa's diffusion through the Christian world cannot be understood except in the light of Scholasticism, refracted though that light has been in the

successive lenses of the pagan Renaissance, the Reformation, the philosophies of Descartes and Rousseau and Kant. Especially is Shakespeare incomprehensible save in that light, since in England its earliest refraction came so shortly before his day that about his young head the white luminosity of the Summa yet lingered. This is no naive assertion that Shakespeare was a Catholic, or that he actually felt a Dantesque vocation to make poetry out of Scholasticism; but it does mean that the critic who knows little of, and attends less to Scholasticism's Christian interpretation of the universe will miss something important in Shakespearean tragedy. Recall Tolstoy's great obfuscation in the hands of just such critics.

Clear in the theology of ancient Israel, in that of St. Thomas equally clear and elaborately refined in detail, is the unhesitating idea of an almighty and good God, held unwaveringly good in spite of the riddle of human suffering, which he could prevent. For Job and for St. Thomas man's will is physically free. For both, the notion of human happiness exceeds, without deserting, the bounds of this world to embrace endless beatitude in the next. For both, so bright is man's promise of felicity, so eager his will for its attainment, that his whole life on earth is characterized by its seeking. For both, the problem of man's pain includes the fact of the Fall and its penal effects on man's body and soul, with results exhibited in the long epic of mankind's spiritual and material woes. The certainty of Revelation, supported by that of Reason, is for both Hebrew and Christian the source of this concept of man's affair with God in its large lines and in its detail. Much that is Greek it rejects; some it retains; in its Thomistic expression, the concept refines exceedingly. But there the Problem of Evil remains, and becomes by refinement intellectually more acute, emotionally more poignant than ever before. This is tragedy's debt to St. Thomas.

The existence of this rich legacy has escaped the view of many students of tragedy or has met with their casual, uncomprehending dismissal. When the critic is agnostic this carelessness is intelligible, since to him the Summa, whose content he grasps only slightly and whose tragic significance he grasps in no way at all, is a sealed chapter in a closed book of history that will never be reopened. But there are writers living daily in the light of the Summa who have gone too long to school under shortsighted critics of the sort described. These too quickly relinquish their treasure, precious even in such a field as that of tragedy. No one who knows his St. Thomas should make the mistake of thinking that tragedy depends on agnosticism, that tragedy goes out the window when Christian philosophy and theology come in the door. To their treatises on the Problem of Evil even the greatest scholastic theologians append the colophon: O altitudo! There is too much simplicity in the facile supposition that Catholic theology abolishes the problem utterly, that it clears up all details of the relations between Almighty Providence and man's use or misuse of free will in his

quest of happiness. For instant proof of the opposite, recall the white heat of the Bañez-Molina controversy on Grace in the late sixteenth century, a high refinement of speculation on the Problem of Evil, the inherent supernatural interest of which must not obscure the perseverance of the riddle for Catholics on a this-worldly, natural plane as well. Readers of Newman will recall his eloquent account of the latter in the fifth chapter of his Apologia, to which the doubting may turn.

What the Summa means to tragedy may be summed up briefly as follows: it provides the true Divinity of tragedy, towards which Greek drama was straining, and which the secular English drama gradually eliminated with incalculable loss; it enlarges the scope of the tragic vision, adding to time eternity; it equips tragedy with a true and final theodicy including the mystery round which tragic poetry revolves.

I may add the conclusion that this theodicy is our only hope for high tragedy's future. As long as art bears on her shoulders untruth or half-truth, she will bend to earth under its weight; released, as in the theodicy of the Summa, by truth, tragedy may rise stately and straight and sublime to her full height-which is above that of her ancient days in Greece or her more recent days in Shakespeare. And if proof is required of her present need of release, one has but to examine her modern history. The last glimmerings of the Summa's light on the Elizabethan stage have faded long ago. Heaven has long since closed again over tragedy, and is forgotten; so roofed over. tragedy has sickened and died. Contemporary attempts at serious drama are closely bounded by the confines of this sublunary world; so true is this and so definitely accepted by playwrights themselves, that they have forgotten the word tragedy. A play so styled would be a novelty today, its quaint label held faintly pretentious. Tragedy is no longer written.

Not a delicate adjustment of agnosticism and faith, not merely the New Humanism—only the full and perfect faith and the complete humanism, natural and supernatural, of Scholasticism will restore to tragedy the lifegiving theodicy bequeathed to her in the thirteenth century, but never fully claimed. "We maintain, therefore, that the first essential, the life and soul, so to speak, of tragedy is the plot." This theodicy is that plot.

And what of the obvious and, at first glance, numbing objection, that the poets are not of my mind, that they have done very well with other theodicies than that of St. Thomas? I have already disclosed that I revere the Greeks and Shakespeare, on this side idolatry, as much as any; I cannot, however, submit with those who say that nothing higher in tragedy can be achieved. For, entirely apart from religious controversy and speaking solely from a literary point of view, I regard the pagan Renaissance (not the Christian) as the Great Assault, and the Reformation as the Great Betrayal of the plans of a Providence that had meant to favor English literature far above all

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## Philosophy and Literature

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HAT philosophy and literature are closely related is a truism. Yet, to understand this relationship is not lite so simple. We may well begin with definitions, for e definitions of philosophy and literature open a field investigation which reaches to the very foundations of e, to ultimate truths.

One could give as many definitions of philosophy and scope as critics give of literature. It is necessary, hower, to prescind from a discussion of the former problem d by philosophy specifically denote the Scholastic or ristotelian system. In this system alone is philosophy ven preëminence among the natural sciences. A Neoholastic defines it as "the science which by the natural tht of reason studies the first causes or highest principles all things-is, in other words, the science of things in eir first causes, in so far as these belong to the natural der"; and of its relations with the other sciences he ds: "Philosophy is the highest of all branches of human owledge and is in the true sense wisdom. The other luman) sciences are subject to philosophy in the sense at it judges and governs them and defends their postues. Philosophy on the other hand is free in relation the sciences, and only depends on them as instruments nich it employs." Newman's conception of philosophy the Idea of a University will clarify what we mean by sovereign and comprehensive nature. Since its subject atter, the universe, is an intimate whole, he rightly ints that all knowledge is a whole, and further, that the dy of any part without its reciprocal relations to the her parts and its subordinate position in the whole hough for the sake of simplification each science by a ental abstraction must record simply this or that single bect—is subversive of true knowledge and results in a tortion of reality. Thus:

The comprehension of the bearings of one science on another, and the use of each to each, and the location and limitation and adjustment and due appreciation of them all, one with another, this belongs, I conceive, to a sort of science distinct from all of them, and in some sense a science of sciences, which is my own conception of what is meant by Philosophy, in the true sense of the word, and of a philosophical habit of mind.<sup>2</sup>

ilosophy conceived as such bears upon every phase of man activity and, considered in the purely natural order, astitutes that cohesive group of principles which, whether asciously or unconsciously realized and acted upon, gives the diverse elements and apparently unrelated acts of

Time-Order a fundamental coherence. This does not an that life can be reduced to a single causal principle, entific or economic or philosophic. Such deterministic aplification is contrary to the facts and it results, as one estanding modern student of the relations of religion, iology and culture notes, in utter unrealism.<sup>3</sup>

Undoubtedly one does not question philosophy and theology in the abstract whenever one acts, but just as undoubtedly what one thinks on these matters enters into each act. A man's principles of living-and often enough they may not be the ones he theoretically thinks he possesses—become a living part of the fabric of his being; they color his mind and give it a particular tone; they are his outlook upon Time and Eternity, upon God and man, and by them he lives; from them his life assumes a particular pattern; through them it gains a unity and a meaning. Abstractly considered, they are his philosophy and religion; concretely, they are his way of life.4 Thus by a sort of "unity of indirect reference"—to give Father D'Arcy's phrase a slightly different connotation<sup>5</sup>—out of the heterogeneous matter grows the living, correlated form of his life. This is true of any philosophy or any religion. When these fundamental ideas are the Catholic ideas and, when they have given to his mind that particular Catholic "philosophical tone or color," Newman's ideal of Christian education is realized.

But just what has this to do with literature? Either everything or nothing. The answer hinges upon what one means by literature. Opinions as to just what literature is range everywhere from that exaggerated realism championed by Zola in the nineteenth century, and in the present by such writers as Dreiser, Lewis, Sandburg, and others, to the ultra-romanticism of the late fin de siècle group, and of Croce and the younger aesthetes, from the "popular superstition that realism asserts itself in the cataloguing of a great number of material objects, in explaining mechanical processes, the methods of operating manufactories and trades, and in minutely and unsparingly describing physical sensation,"6 to Signor Croce's theory of art as pure vision, as an aspiration enclosed in the circle of a representation and in which the aspiration exists solely by the representation, and the representation solely by the aspiration, whatever that may mean. The variety of definitions that lies between these two extreme poles is infinite. We shall use Newman's as a working basis:

Literature consists in the enunciation and teachings of those who have a right to speak as the representatives of their kind, and in whose words their brethren find an interpretation of their own sentiments, a record of their own experience, and a suggestion for their own judgments.<sup>8</sup>

It will require both elaboration and a slightly more philosophical approach.

Let it be recast in this fashion. Life (and by that we mean man and his relations with God and his fellowmen and the rest of creation) forms the province of literature. But this is true in another sense of philosophy, history, and the arts. By the use of language as a medium and by artistic representation—which I use in the Aristotelian

sense of imitation9—it is set off from the other arts and from the sciences. That language is the medium of literature is scarcely questionable, but the idea of artistic representation requires interpretation and defense and is, in truth, the crux of the question. Generically, by artistic representation I mean the universal quality of great literature: its use of the particular incident to embody and give a living form and existence-artistic, not real-to the universal. In this it parts both with philosophy and physical science, each of which are concerned with one, not both, of these phases of reality. In short, this "shining forth" —the claritas of St. Thomas 10—of the universal truth and beauty in the particular medium and incident chosen is the final aim of the artist. He seeks to reduce all to meaning and order. Human life and its phases, the visible and the invisible, are the realities present to him. All may seem at first glance meaningless, incoherent, and unrelated. Examination reveals the teleological character, the striving toward an end and its ultimate realization. Philosophy is content to examine into and discover these underlying causes and the fundamental relationship of all reality referred either to the created or the Uncreated Cause. artist seeks to represent this reality in another medium and in this sense is creative. The particular reason for the desire of such artistic creation is a psychological problem and it suffices for the present simply to accept it as a fact. He cannot give us the actual reality, the matter vivified by the form, but he can use life as his material and represent it in another medium. His achievement will be artistic, not real, in that it can never be more than a representation of the actuality imitated. The particular incident he selects from the infinite complexity of the real or the probable, and the medium he chooses, constitute his working material. On these he impresses a teleological character: he endows them with meaning and unity; he "forms" them and thus in an analogous sense brings them to life. The character of speech illustrates this point. Here the matter is but a meaningless sensation until the thoughtthe logos-informs it and gives it substance and meaning. Such is the effort of the literary artist; he deals with the twofold logos: that of speech—the individual word and phrase—and that of thought—the teleological significance and purpose of the whole-while the other arts seek directly to impress the logos of thought upon an unmeaning medium. I may now sum up the inquiry by defining literature as the artistic representation of life through the medium of language. This definition takes cognizance of both phases as Newman suggests: the writer is not any man, but only he who can and does artistically create and thus has the right to speak as a representative of his kind; his work is not simply a copia verborum, whether oral or written, but work of such universal quality that his brethren find therein an interpretation of their own sentiment and a record of their own experience.

The foregoing discussion, by making clear just what I mean by philosophy and literature, makes the relation between the two almost obvious. If the writer is to imi-

tate life, he must first know its fundamental truths. Knowledge in this sense is an essential prerequisite for artistic imitation. It does not necessarily have to be formal and abstract; he who has lived in a culture whose spirit is quickened by truth will be so influenced by that atmosphere that without formal realization he possesses the true view of life. Though he has not yet systematized and correlated his knowledge, should he do so he would discover his philosophy of living to be the practical application of true metaphysics. If he goes basically astray on any one of the ultimates which he portrays—as the nature and end of man; his relationship with God; the great problems of certitude, of evil, and of being-his work will so far be distorted and untrue. Keat's "Beauty is truth, truth beauty" is correct in so far as it postulates truth—trueness to the object imitated—as a positive requisite of art. A correct philosophy, and by this I mean a correct formal philosophy as distinguished from its practical living-out, is one of the most effective preparations for the writer. This is all the more true today when he cannot hope to be aided by the prevailing culture but must even guard himself against it. Perhaps it is more essential for him than for any other artist. The largeness of view he takes, his effort to encompass the whole of reality in a way the sculptor, or painter, or musician, due to the limitation of his medium, would not dare, increase immeasurably the danger of error and, when he has erred, make his distortions far more obvious.

The briefest study of the literature of the English race alone confirms this view. Scarcely any writer of note has. not at some time or other directly sought to philosophize, and where this is not directly done, as for instance, in Jane Austen's cool, detached presentation, the whole work is permeated by the Zeitgeist. The writings of Wordsworth or of Johnson, of Macaulay or of Pater, or of any other representative English author cannot be correctly and fully understood without a knowledge of the philosophy of their periods, of their own view of life, and the coincidence or antagonism between the two. One can probably catch more of the spirit of a certain class of the Mid-Victorian gentry from the novels of Trollope, properly read and understood, than from a dozen histories of the purely chronological type. But if one lacks a correct philosophy of one's own as a true standard, or possesses no knowledge of the spirit of that age, one will miss completely the undertones—that aura of spiritual and emotional significance that pervades any book and gives it its own distinctive coloring and meaning-and in missing them, really miss all. Some writers more than others, as Miss Cather, are preoccupied with this problem of a philosophy of living. Nevertheless, I think it can safely be asserted that in no great writer is this preoccupation wholly absent, either implicitly or explicitly, since it flows from the very nature of his imitation, in the way his characters live and move, in their meditation and utterance, in his own asides, or, as in lyric poetry, in his own impassioned revelation, he will give some answer. Thus, as

vman says, the great writer affords us "suggestions for own judgments." He deals with the universal quess of good and evil, of sorrow and joy, of beauty and delight therein; questions that confront every man, in so far as he approaches or departs from the truth

can help or hinder, inspire or warn us. Yet this aspect st not be overemphasized. "The fact is," writes Paul ner More, "that ethics and aesthetics are inseparable in Or, more precisely, just in proportion as the practise criticism of art becomes superficial, ethics and aesthetics to fall apart, whereas just in proportion as practise criticism strikes deeper, ethics and aesthetics are more more implicated one in the other until they lose their inction in a common root." 11 Though this statement rue in the main and, though ultimately both ethics and hetics find their common root in the natural law and Divine Nature, it shows a touch of the humanistic r of trying to substitute literature for philosophy and gion. Literature is the product of fallen human nature, able indeed of truth but liable to sin and error, and l always be a commingling of the true and the false. h we find it in the past, such will it be in the future. rature can never become the basis of our judgments; it never give us more than a suggestion and this, only if orings from a true view of life-a true philosophy and ue religion.

uch is literature in its creation and enjoyment. There nother aspect more important, perhaps, from the philonical view: the criticism of literature. A correct standis indispensable for correct evaluations. Rhapsodic tement will never do. Too often it springs from a ely subjective or emotional philosophy. One of the e encouraging signs in the United States is a reaction nst such an attitude, and it is no longer quite sufficient a book to be piously sentimental to be praised. The plastic critic must thoroughly understand not only his es but every other branch of his philosophy. Episteogy and psychology, logic and ontology, theodicy and nology, all must be assimilated. One period will draw n one phase more than another; the breakdown of raal psychology, for example, in the eighteenth century, the rise of materialism and sentimentalism presented cially psychological and epistemological problems.

This does not imply that the criticism of literature must

be changed to a history of philosophy. The Scholastic with his clear-cut distinctions would be the first to fight against such a usurpation. But since the philosophy of an age so evidently permeates its literature, philosophic knowledge is an indispensable background. It is a part of the critic's preparation; a preparation that will include not only a knowledge of Scholastic philosophy and of religion, but some acquaintance with history, sociology, and the sciences. He need not be a specialist in all or any of these branches. That would be asking too much. If he is to take that largeness of view which Newman rightly calls philosophic, he must have an acquaintance with them, an ability to make use of their findings and to understand their bearing on his own field. Above all, he should be thoroughly grounded in his philosophy and in his Faith to make the proper approach to literature. It is not enough to know the facts; he should be able to understand them. In a word, he must have a Catholic mind.

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- <sup>2</sup> Newman, J. H., The Idea of a University, Part I. Discourse III, sec. 4.
- 3 Dawson, Christopher, Enquiries into Religion and Culture, Sheed and Ward, London, 1933, pp. vii-ix.
- 4 Dr. Allers is insistent upon this concept of "totality" or of a "dynamic whole" in psychoanalysis. "If we want to understand a subject's reactions," he writes, "we must take into account his whole previous history up to the moment of his experience." cf. especially pp. 52-59 of The New Psychologies, Sheed and Ward, London, 1933.
- <sup>5</sup> D'Arcy, M. C., S. J., The Nature of Belief, Longmans, Green and Company, New York, 1931, pp. 186-198.
- 6 Cather, Willa, Novel Demeuble in A Book of Modern Essays, ed. by Edwin B. Burgum and Bruce McCullough, New York, 1926, p. 392.
- <sup>7</sup> Paul Elmer More has an excellent discussion of what he terms "The Fetish of Pure Art" in his The Demon of the Absolute, Princeton University Press, Princeton, 1928, pp.
- 8 Newman, ibid., Part II, Discourse II, sec. 9.
- 9 I have used representation instead of "imitation" which Aristotle uses so insistently in the Poetics. Due to the neoclassical misunderstanding of the term, a notion of mere external copying still clings to it, and, though "imitation" properly conceived is to be preferred, for the sake of clearness I have used representation.
- 10 Sum. Theol., Ia, q. 39, a. 8.
- 11 More, Paul Elmer, op. cit., pp. 108-09.

### Reflection on Reflection

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HILOSOPHY brought face to face with reality, in spite of the admirable order that seems to reign e, is often face to face with confusion. The order trips our powers of intellect in more instances than and the more we probe into its mysteries the more do become enmeshed in a supposedly "inextricabilis "." Still it is our nature to want to know,-an instinct th is the most insatiable, for we are not satisfied until we exhaust what can be known, by making of reality a "hymne des relations entre tout," a perfect unity. But does not the fact that we question reality indicate that we have already attained to some degree of knowledge about things? We say we observe reality and think about it, but what does that mean: to observe and to think; and why say we think? What is the relation between the capacity of knowing and being known? This is not a

new problem, for it marks the point of departure for Plato, which was reiterated by Aristotle, only to be reformed and perfected by St. Thomas.

It is a fact that I am myself and am not another; I am conscious of my own identity, of my unity, of my distinction from everything else, of my opposition to all.¹ I have immediate consciousness of these others intruding on myself; something exterior to myself becomes myself in some way since I experience it and feel it as a sorrow or a secret joy. What is more, only by this intrusion, which, by stirring me to action and to life, awakens in me knowledge, do I discover myself as distinct from others. If I did not feel or think this or that other, could I think or feel a self at all? No; this or that other reveals to me the subject; the object renders me visible to myself in determining me; its light shines upon me and reveals my mind as mine.

That is why the attitude of the sceptic and of the subjectivist, who pretend to know nothing, or only self and the modifications of self, contradict nature in their process and stifle any beginning of growth in scientific investigation. I would know nothing of myself as a self, neither that I know, nor that I exist, if something outside of myself did not awaken in me the consciousness of myself and of my acts. My thought returns to itself only by the détour of the universe.

Thus Lavelle concludes:

L'espace tout entier est un miroir infini dans lequel il (le moi) discerne le jeu de ses différentes puissances, leur efficacité et leur limites . . . Celui qui veut se connaître de plus près se regarde dans un autre moi qui est toujours pour lui un miroir plus émouvant.<sup>3</sup>

(All space is an infinite mirror in which it (my being) discerns the play of its different powers—their efficacy and their limits. . . . He who wishes to know himself better looks at himself in another, which is always for him a

more vivid mirror.)

Accordingly, my conscious knowledge of myself is the fact of an excitation, of a disparity. I am conscious of self only by the fact of becoming something else, and I become more myself in becoming all.<sup>4</sup>

But how can we become all and how can I become myself in becoming all? By thought; for

... arrachez vous la pensée, nous ne sommes plus que la bête obscure dont un antre et un arpent de forêt sont le domaine; arrachez-vous toute connaissance, et il ne reste de nous qu'un fragile néant.<sup>5</sup>

(... take away thought, and we are nothing but an obscure beast, whose haunt is a cave and an acre of forest; take away all knowledge, and there remains of us only a fragile nothing.)

So it is our intelligence which enables us to know and become the other, the

étoile qui annonce un monde noveau, l'oeil de la nature, l'oeil que la nature élève vers le ciel, oeil déjà pénétré de ciel, oeil qui appartient au ciel, qui est un ciel par sa substance et par son pouvoir, par son contenu de lumière toute céleste, qui est terre seulement par les moyens organiques dont il fait usage.<sup>6</sup>

(... star which announces a new world—the eye of nature, the eye which nature raises toward the heavens, an eye which knows the secrets of heaven, an eye which belongs to heaven, which is heaven by its substance and power, by its content of celestial light, which is earthly only by the organic means it uses.)

This problem of knowledge plays the central rôle in the Thomistic system; it is the arch which supports the whole Thomistic edifice, and the keystone of that arch is the idea of reflection, by which act "the mind turning upon itself seizes itself as knowing; and at that moment there is not distance between the object (act of knowing) and the subject (the reflecting mind)." It is to this act of reflection to which St. Thomas invites us in order to assurourselves of the satisfying possession of truth.

Reflection in its usual sense is taken to mean a distinc act subsequent to the judgment,9 but here in St. Thomas text is meant immediate reflection, not really distinct from the act of judging, by which I know that I know; that is, I know myself knowing, and I know, too, the relation (proportio) of my act to the object, a unity and a duality In fine, judgment, identified with reflection, is the culmination of a long process to which mind subjects its idear (completivum cognitionis); 10 it is the critique of the object known and of the whole act of knowledge; an expression, therefore, a relation and an opposition, a distinction and a union of the object and the subject. This reflection it is which gives clarity and surety to the whole process of thought, enabling the thinker to possess truth and to become all in that thought.11 Before we enter into the mechanism of generalization which belongs to the order of reflection we ought to summarize briefly the data of the preliminary steps in the progress of cognition, thus to set off in relief the immense speculative wealth which is discovered in this final act of judgment by reflection. 12

In the simple apprehension the mind knows but does not know that it knows: there is no consciousness of mind and object as such. May we say, nevertheless, that the intellect which perceived the concept perceives itself in a certain way? If the object, in so far as it is represented in and by the concept, is not distinguished from the intelligence in act, is not seeing the object in the concept seeing itself in act? This apperception of itself, at best, is only very vague: it sees mainly the object represented in the concept. But it can have no vision of the latter without seizing and knowing itself as an active agent, for in all intellectual intuitions there is a certain consciousness of the activity which produces it.

It is impossible to represent the ego as the subject of intellection without at the same time submitting the non-ego to the same reflection. The objective reality is represented in the concept by opposition to the subjective being as one living concrete reality. The existence of the ego and that of the non-ego are two primary and correlative facts, data in the consciousness of the concept, but as subject and object they form, with the act that united them,

one only reality with a double aspect. Analysis decomposes this admirable synthesis, but the synthesis subsists under the intuitive and concrete "regard de la conscience" ("gaze of consciousness").

This act of knowing, thanks to the power of the intellect to reflect upon its act, enables the mind to become immaterially the other thing in quantum aliud.13 As soon as we know, we have become the non-ego, and this nonego is ourselves. In terms of Aristotelian metaphysics, this act consists in possessing, together with our own perfection, the formal perfection of a different and distinct thing. It is the form of being (species) of the object known which communicates itself to the subject, not as a hatural form incarnated in matter, but intentionally (intentionaliter), in so far as it is an idea or intention of nature. That is why we say knowing is being the object, for as the subject (ego) becomes the object (non-ego), reflection envelopes it with its light, penetrates this communion and seizes the object. My judgment, or expresion of this synthetic intuition,14 pronounces that I am n a way that which I know, that there is an adaequatio rei et intellectus (an agreement of object and mind), a conirmation to my mind that I possess truth and certitude. The ego has become non-ego without renouncing itself. Herein lies the vitality of St. Thomas' method, which nvisages an immanent and vital activity and makes the objectivity of knowledge the very end of its activity. 15 in this act our intelligences live in becoming all things, for us soon as we know, we are the other, and the other is burselves. In this one act of reflection we know the id quo (the mode) and the id quod (the object) of our knowldge immediately present to the operations of the mind. 16

In this act of judgment and reflection there is a distinct luality and a conscious unity, which I cannot have in imple apprehension. I can say: "This tree is green, and know that it is green." I realize in my mind the greenless of the tree; I know the tree as distinct from myself and get a clear idea of myself through that very difference nd opposition, which means that by my reflection I get a listinct idea of the ego and of the non-ego. But at the came time I am conscious of the tree; it has become part of my conscious being; it is part of my self-realization. n fact, I may say that I am the tree in a more perfect way han the tree is itself because the reality of the tree is its ntelligible form, and that form is better realized in my nind than in the material tree. After all, the reality of he tree and of all the material framework of the universe s in the divine intention of the Creator. It is what God neant it to be. But God does not mean any material hing to be itself for itself. He gives it to the mind to be realized, to become the mind, in a way, through the vital ct of thought, which culminates in reflection, which, in urn, we may call conscious possession.

An example may be cited. The reality of a picture is of such length and breadth of canvas, such a quality of plors or chemicals, which can be measured and weighed;

it is the idea. It is more real in the painter's mind even before it is actually painted. The perfect painter has no need of the material picture; he has made it to communicate his own idea. Its intelligible reality is entirely relative to the mind, the painter's or the connoisseur's mind. Suppose it to be perfectly known, to be realized by the mind or minds which can appreciate it, it may be destroyed without loss of reality. So, too, if all the scholars capable of understanding Aristotle had made such an intelligent perusal of his books that they knew his mind perfectly, there would be no loss in the burning of a whole library of Aristotle's works. These savants would be the works of Aristotle in a way, for by their thought and a subsequent reflection on that thought they have become in a spiritual way what is contained in Aristotle's works.

It is in the first book of *De Veritate* that St. Thomas gives the doctrine about reflection. I know, and I know that I know, he says. In other words, I know myself knowing and so I know the relation, the *proportio* of my act to the object (unity and duality). Not only that but I know also that my judgment is absolute: it is so and, as it is so, it cannot be otherwise. The whole, the universe must agree with my assertion; nothing in it can contradict that judgment. I know the nature of my mind and its essential relation which finds its expression in what we call the first principles—all this thanks to our powers of reflection.

The characteristic of this self consciousness, or power of reflection,

c'est de rompre l'unité du monde et d'opposer un être qui dit Moi, au Tout dont il fait partie: dans cet intervalle qui les sépare, elle produit l'incessante communication qui les unit, elle insinue à la fois la pensée, l'action et la vie. 17 (is to destroy the unity of the world and to oppose a being that says "I" to the "All" of which he is a part: in the interval which separates them, it produces the continuous communication which unites them, it molds together at one time thought, action and life.)

It is this consciousness which attaches us to ourselves, but yet it is consciousness which dispels our solitude and makes us communicate with the whole universe. Man is a part of the world by his body; but he tries to make the entire world live in his mind; and it is this double relation between the body which is contained in the world and this mind in which the world itself is contained which forms the drama of existence.

Thus there is in our conscious reflection a certain perfection since it enlarges what we are and allows us to cast our rays over the world beyond the limits of the body, giving us a sort of spiritual possession of that world. This possession which we have of the world is itself a dialogue between the world and ourselves in which the world speaks to us as long as we speak to it. In observing its own body or other persons and the whole of nature, the ego observes itself in the evidence, without which it knows nothing of itself. Never does it succeed in attaining its true nature directly; but any being even the humblest, an object the

most insignificant, an event the most trifling are all so many signs which reveal the mind to itself.

To signify that one is alone, we often use the expression: "he is alone with himself," which seems to imply that one is, after all, not alone, but is, in a way, two. The act by which one divides oneself in two, as it were, to reflect upon oneself and to be conscious of oneself, creates in us an invisible interlocutor from whom we seek to know the secret of ourselves. However, of these two things which originate in us as soon as we reflect upon ourselves, one beholds, while the other is the object of the beholding; one speaks, while the other listens.

As the fruitfulness of God's Providence never ceases to produce in the world new beings, so I do not cease to effect in myself new states by the act of my attention and thus in an analogous manner, thanks to the act of reflection, I produce myself. The main office of the knowledge of ourselves gained by reflection is precisely "de nous faire," to add to our being. The ego had the power to become at every instant something more than what it already is. It is not a given being, but a being which does not cease to give to itself; and the consciousness which it has of itself by reflection is not so much the revelation of that which it already is, but rather a summoning to acts by which it is going to be. So too we may conclude that in knowledge the being which I know in myself is no longer myself but another, from the very instant that I know. Thus consciousness is an act by which I always become something superior to myself. This same consciousness, in opening up before us the infinite, shows us the poverty of our own acquisitions, and thereby invites us always to escape from that which we already are and to render living an idea of ourselves which discovers to us endless new possibilities. Do we not, then, by reflecting upon ourselves seek to be that which we ought to be over and above that which we already are? What does this mean but that we are always searching for that which is wanting in us? Because the whole of reality is not an intuition for us and our knowledge not one of complete discovery and possession, our life is that of a wayfarer in search "of the kingdom of himself and of the world."

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- <sup>1</sup> D'Arcy, M. C., S. J., Thomas Aquinas, Benn. London, 1930, p. 122, remarks in this matter: "A rational being not only is a substance that is self-subsisting, but is conscious of it. He is conscious of possessing himself and so is his own master."
- <sup>2</sup> Shakespeare, Troïlus and Cressida, Act III, scene 3, lines 109-111.
- <sup>3</sup> Lavelle, Louis, La Conscience de Soi, Bernard Grasset, Paris, second edition, p. 7.
- <sup>4</sup> Maréchal, J., Le Point de Départ de la Métaphysique, Cahier V, "Le Thomisme devant la Philosophie Critique", p. 14: (Lessianum, Louvain.) "Or, un contenu de conscience, quel qu'il soit, dès le moment où il tombe sous la réflexion, manifeste une opposition d'objet et de sujet, de Moi et de Non-Moi. La réflexion, atteignant le sujet, y découvre un plan nouveau d'objectivité: le sujet devenu objet à son tour."

<sup>5</sup> Sertillanges, R. P., Les Grandes Thèses de la Philosophie Thomiste, Libraire Blous et Gay, p. 21.

<sup>6</sup> Ibid. p. 22.

Bandas, Dr. Rudolph G., Contemporary Philosophy and Thomistic Principles, Milwaukee, Bruce, 1932, p. 171. Cf. also Ibid. Chapters I and IV, passim, and; Maréchal, op. cit., Cahier V, p. 14: "Sous la réflexion, le contenu de la conscience apparaîtra donc comme quelque chose qui tient à la fois, ontologiquement, du Moi and du non-Moi, c'est-à-dire comme une relation entre un Sujet réel et un Objet réel."

8 De Veritate, q. 1, a. 9; Sum. Theol., Ia, q. 85, a. 2; q. 87, a. 3, ad. 2. Cf. also interpretation of this passage "Le sens d'un texte de Saint Thomas: De Veritate, q. 1, a. 9. Boyer, S. J., Charles, Gregorianum, 1924, p. 424: "Veritas nempe est in intellectu ut cognita, quia intellectus, in secunda sua operatione, quae est judicium, supra suam primam operationem, quae est simplex apprehensio, reflectitur. In hac enim reflexione, intellectus non tantum actum suum cognoscit, sed videt actum suum esse realitatis manifestativum. Quod sane videre nequit, nisi ipsam naturam actus penetrando, et in natura sui proprii actus ipsam suam naturam, cognoscitivam apprehendo. In hac igitur secunda operatione mentis, objectum cognoscitur quidem signate, sed actus et facultas exercite cognoscuntur, nam 'non oportet ut id quo cognoscitur, alia cognitione cognoscatur quant id quod cognoscitur eo'.'

<sup>9</sup> Cf. D'Arcy, op. cit., p. 83 for different opinions in this matter. Cf. also Maréchal, op. cit., p. 60 and p. 346, note 2.

10 Sum. Theol., IIa, IIae, q. 173, a. 2.

<sup>11</sup> Aristotle, De Anima, lib. ii, 12; lib. iii, 8.

This whole mechanism of dividing the act of thought into several progressive steps seems to be artificial and unreal. The entire "machinery" of cognition represents only one indivisible act. We make the divisions (as does St. Thomas) only to clarify our notions when trying to analyze thought. We believe that in the very first step in the process of thought there is a virtual judgment; consequently that the distinction of the various steps there is not a real but only a logical distinction. Cf. Tonguedec, La Critique de la Connaissance, Beauchesne, Paris, 1929, pp. 188-189.

13 Sum. Theol. Ia, q. 14, a. 1, 2; Ia, q. 76, a. 2 ad. 4; C.

Gent. I. C. 53.

14 D'Arcy, op. cit., p. 85, "Though the real object is AB we know it in the assertion that A is B, which can be amplified into 'It is true that A is B', etc."

<sup>15</sup> Marc, A., "La Méthode D'Opposition en Ontologie Thomiste," from Revue Neo-Scholastique de Philosophie, Lou-

vain, 1931, p. 150.

16 Sertillanges, op. cit., p. 200: "Souvenons-nous que connaître, c'est être, à savoir être autrui, et ce, par une addition l'acte, l'acte du connu se greffant sur l'actualite anterieure du sujet."

<sup>17</sup> Lavelle, op. cit., p. 3. For a thorough treatment of the possibilities which this act of reflection and consciousness open up in the field of philosophy, Cf. Chapter I and III, passim.

#### THE TRAGIC THEODICY

(Continued from page 32)

others, by producing the genius of Shakespeare, the supreme poet, to weave the Thomist theodicy into supreme tragedy in our language. Far-seeing Providence for our glory denied genius to the poets of other tongues, who had the theodicy; it was short-sighted man who denied the full beauty of that theodicy to our poet.

### Free Will in Nature

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READERS of scientific literature today have become accustomed to the mention of freedom of will as an explanation of certain phenomena in the inorganic world.1 This explanation is styled the Theory of Indeterminism. There is little likelihood that scientists will long continue to maintain that, aside from human acts, there are any events in nature that are truly free. But while the vogue is on, Scholastic philosophers may hope to get a hearing on the subject of free will. In the nineteenth century the dominant scientific theory maintained that an act undetermined by its antecedents was altogether unscientific and impossible. Some present-day savants have about-faced on the question; they claim that it is not only possible, but it is, even in the realm of the inorganic world, a fact, and that the acceptance of this fact is the most progressive step science has taken since the hallowed days of Newton. A quarter of a century ago when any philosopher suggested that man by the free employment of his bodily powers arbitrarily interfered with the course of nature he was branded with the anathema of "unscientific." Nav. such interference was denied even to God. But all that is now changed. Even electrons can act freely.

In August 1928 Professor A. S. Eddington sent to press the following statement. (It was quoted from a lecture given by him the previous year at the University of Edinburgh.)

In the old conflict between freewill and predestination it has seemed hitherto that physics comes down heavily on the side of predestination. . . . Here I have to set forth the position of physical science on this matter so far as it comes into her territory. It does come into her territory, because that which we call human will cannot be entirely dissociated from the subsequent motions of the muscles and the disturbances of the material world. On the scientific side a new situation has arisen. It is a consequent of the advent of the quantum theory that physics is no longer pledged to a scheme of deterministic law. Determinism has dropped out altogether in the latest formulations of theoretical physics and it is at least open to doubt whether it will ever be brought back.<sup>2</sup> (Italics his)

The reason for this abandonment of determinism is that "the next quantum jump of an atom is uncertain." If an atom is in State 3, we not only do not know whether it will jump to State 2 or to State 1; there simply does not exist, so Eddington contends, any condition predetermining what it shall do. It acts without any predetermination whatever. The most we can say is "that of 500 atoms now in State 3, approximately 400 will go on to State 1, and 100 to State 2." It is all a matter of averages, as in the case of beings acting with freedom of will. Thus,

says Professor Eddington, "science thereby withdraws its moral opposition to freewill."

As we have said, the science most characteristic of the nineteenth century was wedded to determinism and to a purely mechanical interpretation of nature, not exempting even man. But, to quote Sir James Jeans:

An almost kaleidoscopic re-arrangement of scientific thought came with the change of the century. The nineteenth century had lasted just long enough for science to discover that certain phenomena, radiation and gravitation in particular, defied all attempts at a purely mechanical explanation. . . . In the closing months of the century Professor Max Planck of Berlin brought forth a tentative explanation of certain phenomena of radiation which had so far completely defied interpretation. . . . It proved brilliantly successful, and ultimately developed into the modern "quantum theory," which forms one of the most dominating principles of modern physics.<sup>3</sup>

But Jeans, at least at a later period, is more cautious than Eddington, and evidently does not favor those who "are very ready to hail any evidence of indeterminism in nature as almost affording a proof of human free-will." Rather, he describes his own position when he says that "a number of moderate men still adopt an attitude of extreme caution, and even suspicion, towards any attempt to reconcile human free-will with the scheme of physical science."

Professor A. N. Whitehead, whose Adventures of Ideas stresses the theory that events are half-predetermined and half-free, shows at times a strong reaction toward determinism, even in human acts.

Perhaps [he says] if we knew enough of the laws, then we should understand that the development of the future from the past is completely determined by the details of the past.<sup>5</sup>

Before entering on a discussion of this question of free will in nature it is necessary to clarify the meaning of the terms involved. Strange vagaries of thought have been occasioned by confusion of the concepts signified by such terms as indeterminacy, causality, chance, probability, statistical average, contingency. Let us try to disentangle the various meanings. Indeterminacy is a lack of specification antedating the event itself. There may be indeterminacy in fact and indeterminacy in knowledge. Indeterminacy in fact means that an event, both in its occurrence and in its character, is not dependent on anything prior to itself. Indeterminacy in occurrence, therefore, signifies that the event came into existence without any efficient cause. This contradicts what the Scholastics call the Principle of Causality, and on that score is rejected as impossible. Indeterminacy as to the character of the event denotes the absence of any existing factor anteceding the event and specifying what it is to be. This indeterminacy Scholastic philosophy admits, because such is the indeterminacy of free will. Next, there is indeterminacy in knowledge. Here we must first ask the question, whose knowledge? If we speak of omniscience, then there is only one kind of event which is not knowable with certainty from its existing antecedents, and that is the act of free will. For although God knows such events with perfect certitude, He does not know them from any predetermining antecedents; because there are none. To suppose that they were knowable from the antecedents would be to destroy freedom. On the other hand, all events which are not free (or not the result of free intervention in the course of nature) are necessary, and are entirely knowable, absolutely speaking, from their existing antecedents. But man does not know all the existent antecedents, and consequently there is a degree of indeterminacy in man's knowledge. In this connection we have chance. Chance cannot mean the occurrence of an event without an efficient cause. It can only mean that in the prediction of many events man is forced to guess. This guessing has been organized by mathematics into the science of probability. Probability here means simply that we are able accurately to define the limits of our ignorance: we can state in a given case at what point our uncertainty begins, what is its extent and what are its degrees. Lastly, there is statistical average. Events in nature occur with only approximate uniformity; even when we formulate the law as precisely as we are able, events will not "toe the line" without an occasional hairbreadth variation. The statistical average is a mathematical device by which the variations are averaged out. as in a nurse's chart giving the patient's rate of respiration. The divergence of single events from the average is called "contingency."

Is there, then, no uniformity in the activity of the ultimate particles of matter? I answer that a total lack of uniformity, that is, unlimited variability or "pure chance," could never yield anything like average results nor afford any basis for the calculation of probabilities. The probabilities and statistical averages which Jeans and others are fond of citing are no warrant for asserting that at bottom there may be no uniformity in nature. Quite the contrary. A little reflection will convince any one that unlimited variability would give no results that could be averaged at all. An average allows for variations, it is true, but only for variations within certain limits. were idle to talk of averaging phenomena whose quantitative and qualitative characters varied illimitably. Hence, to state that our physical laws are statistical averages is indeed to state that, for very fine measurements, they express only an approximate uniformity. But that is far from saying that there is no uniformity in the activity of the ultimate particles of matter.

Furthermore, to assert that there is no uniformity is worlds apart from asserting that there is no determinism,

but only freedom, in nature. For if I cannot formulate a law, not even an average, for the phenomena, that does not justify my concluding that they are free acts. all, it is only the more orderly performances of nature, as the motion of the planets, which make it easy, or possible, for us to formulate the law. Were there only hapbazard happenings, as in the theory of Democritus, it would be impossible to set down any law. But surely the events, on that theory, would happen with the same degree of antecedent necessity as do the orderly processes that we know. The problem of making up a physical law does not depend on freedom or necessity in the events. It depends on how much order there is, and how much disorder. And, granted a certain amount of order in fact, our formulation of the law depends on how much of that order we know. There is, in short, as much determinism in a cosmic cataclysm as there is in the music of the spheres. But it is easier to write the score for the latter. Determinism merely means that the events are predestined by the existing antecedent conditions, whether the events be regular or irregular, whether they can be statistically averaged or not. It is true that the only alternative to determinism is free will, for an event is either predetermined by its antecedent conditions or it is not so predetermined. But events can be predetermined to be irregular as well as predetermined to be regular. Hence the question of how much uniformity, or regularity, events may have is irrelevant in a discussion about whether they are predetermined. Eddington and others who insist on discussing these two totally disparate questions as identically one question have occasioned great confusion in their own minds and in the minds of their readers.

Putting aside, therefore, all discussion of the regularity, whether precise or only approximate, of the events of nature, let us concentrate our attention on their supposed indeterminism. The proponents of indeterminacy maintain that the indeterminism is not simply in our knowledge, not due to our lack of information about the antecedents of, for example, electronic jumps, but that there do not exist in fact any antecedents which predetermine the jumps. Our witness is Eddington.

The future is a combination of the causal influences of the past together with unpredictable elements—unpredictable not merely because it is impracticable to obtain the data of prediction, but because no data connected casually with our experience exist.<sup>6</sup>

If the implication of this statement is true, then there is free will throughout nature. An unfree act is one which is totally predetermined by its existing antecedents; if it is not so predetermined, it is indisputably free.

We may well ask ourselves how any one could come to advance such a doctrine. Among other things, it would seem to be a case of being misled by a word. That word is "causation." The scientist, having observed a certain regularity in the events of nature, sets down a rule: given these conditions, these other conditions will follow. By

me strange perversity of terminology this rule came to called "causation." Certainly there is no good in tarreling over a word, but we may not use the word use in the restricted and technical sense of regular quence, and then proceed to confuse that sense with the ore common meaning. Many a nineteenth century scitist, for instance, argued as follows: An uncaused event absurd, but a free act is an uncaused event; therefore a see act is absurd. The Scholastic would distinguish the ajor, granting that an unproduced event is absurd, but enying that an unpredetermined event is absurd. The determinists of today, scorning distinctions, simply deny see major flatly. They say that uncaused events are a ct. This is confusion worse confounded.

Another old dictum is "Like cause, like effect." This d not, of course, mean that the effect was like the cause: meant that, given the same antecedent conditions, the me subsequent events will follow. But here again we ave a characterization of cause which applies only to unee causes. And from the constant practise of dealing ith unfree causes, too many scientists developed a habit f thinking that there was no other kind of cause. Cause eant predetermined, predictable. At least there was no ther scientific meaning of cause; and what was not scienfic was just common credulity. However, the scientist devoted to fact. And it has now come to be recognized a fact that certain phenomena of radiation and atomic nanges are unpredictable. When this troublesome fact est came to the notice of the scientific world, the experiental scientists were stunned. But the mathematicians ound a way out. Not to be thwarted by these untoward appenings in the experimental realm, they resorted to the erfectly valid mathematical device of averages and probalities; and forged ahead. The mathematicians said in fect: If we cannot have certainty on a minute scale, we least have it on a larger scale; so let us use the larger ale. The amazing thing is that the success of this dece has been regarded, even by mathematicians, as a proof the complete indeterminacy of nature. At the close the last century such statistical averages and probability recasts, when applied, that is, to the number of crimes be expected in the ensuing year, were used to prove at human beings are not free. Now they are used to ove that atoms are free.

In spite of what I have said above, about the scientist's aling with necessary causes, it is still a puzzle how any perimenter could be led to a denial of free will. The perimental scientist insists that he does not merely obveve, he experiments; but without the use of his free will, periment, as distinct from observation, is impossible. It is impossible, thout free will the experimenter is no experimenter at I, but only a helpless observer; he simply watches, and forced to watch, what happens; the items he notices, he as compelled to notice, and could not notice anything se. Without free will he cannot change the conditions, can only observe how they are changed by the inexora-

ble forces which predetermined both him and his "experiment." In a word, unless he arbitrarily controls the conditions, and knows he is doing so, and unless the results are precisely such as would not have happened without that free control, he cannot be said to be performing an experiment. Consequently, it is plain that although many experimental scientists in the past have explicitly denied free will, they have implicitly admitted it and championed it.

But surely it is a far cry from this implicit admission of free will in man to the explicit doctrine that everything in the world has free will. Yet nothing less is contained in the pronouncement that electronic jumps are undetermined by their antecedents. For if you allow freedom to these "building stones" of nature, you cannot deny it to larger bodies nor to the whole world. It is true, the particular phenomena to which freedom has been ascribed are such that we have been unable thus far to subject them to experiment; we are forced to depend on observation alone. But does that predicament justify a throw-back to the obscurantism of the animistic age? Let us answer that question by quoting from Sir James Jeans.

The animistic period was characterized by the error of supposing that the course of nature was governed by the whims and passions of living beings more or less like man himself.<sup>7</sup>

It would seem that experiment, which requires free will, is the only means of disproving free will, and that, lacking experiment, we must accord to electrons the privilege of "whims."

The Scholastic philosopher may be tempted to welcome the admission of free will by "the other side of the house." But he will probably be reluctant to do so; he may repeat with Laocoon, "Timeo Danaos et dona ferentes." And, if it is not stretching a metaphor too far, his fears will be deepened when he hears the illogicalities rattling inside this Trojan Horse. There is, in short, as much violence done to evidence by saying that everything is free as by saying that nothing is free. Hence, for science or philosophy to succumb to the prevalent monistic propensity and declare that either all is free or all is necessary, is to surrender the lordly citadel of reason.

#### REFERENCES

- <sup>1</sup> Cf. e. g., Bavink, B., The Natural Sciences, The Century Co., New York, 1930, pp. 533, sqq.
- <sup>2</sup> Eddington, A. S., The Nature of the Physical World, Macmillan, New York, 1929, p. 293.
- <sup>3</sup> Jeans, J., The Mysterious Universe, Macmillan, New York, 1930, pp. 20-21.
- <sup>4</sup> Jeans, J., The New Background of Science, Macmillan, New York, 1933, p. 278.
- <sup>5</sup> Whitehead, A. N., Adventures of Ideas, Macmillan, New York, 1933, p. 110.
- <sup>6</sup> Eddington, A. S., The Nature of the Physical World, Macmillan, New York, 1930, p. 294.
- <sup>7</sup> Jeans, J., The New Background of Science, Macmillan, New York, 1933, p. 33.

# EDITORIAL Anti-Rationalism

THE Modern Mind has come in for severe criticism in these last few years. A growing number of intellectual leaders have arrayed themselves against it. One has only to think of the dithyrambic indictment of Berdyaev, the trenchant criticism of Maritain, of Belloc, and of Christopher Dawson. These men and a score of others have, mercilessly and cleverly, laid bare the provincialisms, the fetishes, the inanities of the Modern Mind. But in this symphonic voice of disapproval there is one note that constantly recurs, one charge that wounds the pride of modernity to the heart. For if Modern Man has looked upon anything as peculiarly the mark of his own time, that thing is surely severe rationalism. Yet, his critics have scornfully branded him—the Modern Man an anti-rationalist. His rationalism is, in their eyes, a cheap substitute, a pseudo-intellectualism.

But the attack has not gone unchallenged; it has not been the beating of a spiritless adversary. Some have taken exception to the indictment drawn up by these clever writers. Certainly, there are shadows in the culture of today. Modernity is not final perfection, and, with its worship of progress and novelty, it is itself the very first to confess that the future holds still greater promise. Science, the unique achievement of our era, is not lightly to be dismissed. Hospitals, with all their splendid equipment, their service to suffering man, offer an example of what scientific achievement can mean. A striking contrast, indeed, to the plague-infested middle ages with their much vaunted culture; then, men died in the streets, the living had recourse to powerless superstitions. Moreover, the universal education of our time, the humanity which pervades the whole mass of peoples, the preoccupation of the learned with things rather than with words and abstractions are but so many indications of a superior civilization.

Science deserves the highest praise and admiration. The discoveries and inventions of the last several centuries have undoubtedly revolutionized human life, and much, at least, of the effect has been beneficial. Nor has science grown by mere chance; it has been built, in part at least, by the energy of great minds, and it, in turn, has developed in its followers a certain hard-headed mentality. Yet, we must not overlook the limitations of science even in its own field. As a rational explanation of material phenomena (and its own investigations have vastly increased the number of facts and their complexity), it does not carry the certitude many think they recognize in it. The very mutability of its theories, the remodeling of scientific law that is constantly going on bears witness to the imperfection and possible falsity of its leading theories. One has only to look into the textbooks of a generation ago with their "fluid" theories of heat and magnetism to realize how ephemeral are scientific explanations. All this is not said in scorn or in disregard for the true greatness of science. Its true greatness is beyond scorn or disregard. Rather, these things must be pointed out lest one confuse scientific progress with universal progress and scientific theory with absolute truth. It is all very well to look back, patronizingly, on the naive view medieval men took of heat and of fire, of medicine and of astronomy, but it brings a sobering humility to reflect that future ages may very well find the concentric shells of the modern atom as naive and fantastic as the concentric spheres of the Ptolemaic heaven.

On the other hand, the precise point in the criticisn passed on the Modern Mind must be emphasized. It is true that these critics speak enthusiastically of the triumph and the glories of medievalism, of "the God of gold and flaming glass" who was worshiped in their cathedrals They do, at times, seem to write as if the thirteenth cen tury were a golden time of joy and festive living. Yet they are not mere laudatores of the past, and it is simply absurd to talk as if they desired to bring back Feudalism and the Cross of Crusade, the four elements and the sub stantial fire of medieval science, the rack, the rope, and the Grand Inquisitor. The middle ages were full of darl shadows; the men of those times were every bit as human as ourselves; they had, indeed, just emerged from the night of the barbarian invasions. But the Medievalists as these critics have been called, are not such because they want to transpose to modern society and modern though the provincial patterns of any bygone age, the accidenta forms of government and thought which were the concrete reality of those times. Their aim is more fundamental. Their view is more fundamental. It is despite all the good things we moderns are justly proud of and indeed, while recognizing them, that our critics proclaim at the heart of contemporary culture, a radical irrational. ity. And it is despite the innumerable flaws and faults of the medieval commonwealth that they find in it elements of a fundamental sanity. For, however strange the clothes of medieval man, however strange his thoughts of unicorns and sea monsters and the properties of rare stones, there was in his mind a radical rightness.

The principles that constitute this radical rightness dropped out, to a large extent, as medievalism opened out into modern times. We have somewhere turned down the wrong road. Now, these principles, in themselves universal and logically inescapable, medieval only in the sense that they then found concrete embodiment, constitute the medievalism of the modern Medievalists, of Chesterton, of Belloc, of Maritain.

While it is true that the loss of these principles has effected disastrously both speculative science and practical affairs, let us here limit ourselves to the practical order.

he intellectus practicus of modern man is vitiated fundaentally, for he has lost the Scholastic idea of essential der.

Now, the word "order" has come for us to denote mething stiff and conventional. But as here used order ses not mean the external and, so to speak, quantitative atness of the mechanist's universe or of a Victorian parr. Order looks to something more fundamental. It oks to unity founded on natures, not the unity of a at pile of bricks but the unity of two hearts in love, of goodness in a prime Goodness, the unity of all effort d sacrifice in the fruition of victory. It is an intrinsic lation of essences, a oneness in the heart of the world's ange, in the come and go of phenomena. Only the nilosopher who has left behind the shadows of the Cave n see this order in the full splendor of being, only the pet whose intuition carries an essential verity can be imbled in the vision of order. But anyone who wishes appreciate the application of order to the practical inllect must see order not as mechanical or accidental but an interdependence of essences.

The Ptolemaic system is symbolic of the medieval view essential order. It centered the universe about man in physical sense, just as Scholasticism centered the unierse, in a spiritual sense, about man as man. Chesterton as remarked that he cares far more for the essential thing at makes all men alike than for the eccentricities like an r for music or a flair for trade that mark off man from This same democracy was the democracy of an. edievalism. Man as man is stamped with the mark of birit, and, therefore, as such he is apart from and above I material things, their lord and master. All visible eation is orientated towards him, the things that give ols into his hand, that clothe and guard his body, that inister beauty to his eye, find in him their completion. Omnes enim scientiae et artes ordinantur in unum, ilicet ad hominis perfectionem quae est ejus beatitudo." St. Thomas, Prooemium in XII 11. Met.)

This is true humanism, a humanism that dates back to ristotle and the divine Plato, to the "ethical bias" of crates, who refused to honor in man any excellence ve human excellence; a humanism elevated, illumined, mpleted in Christianity, a humanism that pervaded rery part of medieval living. For the medievalists, no mount of external largeness could have cowed the spirit man; they would have refused to worship a whaleborrow again from Chesterton-merely because it is gger than a man. Even had they known of the astronnical distances of today they would not have counted e ultimate recesses of our universe of more value than man. For them, the profusion of fruits and animals ere for the feeding of man, the realm of natural law nd natural fact for the exaltation of his mind, the beauty the whole world was for the completion of his eye nd ear in the high delight of contemplation.

But the medievalists were well aware of man's limitaons; they would honor but not worship him. So they rose above this order of limited essences to the Absolute, to a Being the glory of whose creative act found consummation in rational creatures.

But we of modern days have turned away and ignored this order founded on a rational consideration of essences. Man's false deification in the Renaissance has led, in reaction, to an equally false subordination of him.

Art, aesthetes tell us, is independent of all other departments. Art for art's sake! Ethics, the science of human action, cannot touch it. The medievalists and the Scholastics believed in art for man's sake; we paint, they said, to make saints (the happiest and most perfect of men) and to give joy to God.

Modern learning declares its independence, its loyalty only to Research and to Truth. (The prevalence of abstract catchwords is an evidence of our loss of a concrete human value.) Men sacrifice themselves to it for its own sake lest any little fact be lost or any little row of facts remain uncounted. The medieval university sought truth for the sake of man, that wisdom might flourish in his mind and so perfect him unto God.

In applied science, Progress demands more machinery, increased production, jealous property rights, regardless of the misery of the workers and the destruction of their spiritual worth. Labor of the human hand was in esteem among medievalists but they would never have consented to enslavement to a tool—no matter how large it be.

In business, trade has been subordinated to the heaping up of unthinkable sums of money. Indeed, the true purpose of production now sounds to us like an echo from Utopia. The use of man, the well-being of the community is the Scholastic end of trade. Indeed, the Scholastics pointed out vigorously that articles produced for profit would inevitably be inferior.

And in private life, the crumbling of this spiritual hierarchy has left what tensions, what sadness, what eniptiness! Why care for anything? A series of short trivial occupations lie open to a man. He buries himself in his work, grows perfect as architect or tradesman and passes into decay as a man. A man devotes his life to pushing back the bounds of ignorance and, having no norm, he confuses lesser truth with great truth and grows steadily more learned as he grows steadily less wise. Of what use a growing science, why count and add, if the sum is as useless as the sum of bricks in the back alley? Of what use machinery and factories, if we can make in them everything—as Carlyle said—except a man? if the cutting and stamping of pinheads is the destruction of spiritual worth in the man who feeds the machine.

The irrationality, therefore, of modern culture is basic; it is the capital practical error, the exaltation of a million means into a million ends. Life's supreme value does not permeate all occupations and purposes; a thousand unsatisfying and unconnected goals claim our efforts. Hence, amid all our violent departmental progress we get very little nearer to the supreme end.

### **Book Reviews**

CATHOLICISM IN EDUCATION

By Franz DeHovre, Ph. D.

Trans. by Rev. Edward B. Jordan, M. A., S. T. D.

Benziger Brothers, New York, 1934, \$3.48

In this work, a companion volume to the same author's Philosophy and Education. Dr. DeHovre has attempted a positive exposition of the Catholic philosophy of education. The book is designed, primarily, for use as a textbook in normal schools and teachers' colleges. Believing that the major defect of modern education is to be found in its lack of a science of ideals, in the utter obscurity of its aims and purposes, the author devotes the first portion of the book to a detailed explanation of the fundamental principles which form the basis of the Catholic philosophy of life and education. He criticizes with effect the exclusivism which characterizes the so-called modern educational philosophies with their "one-sided conception of reality, of man and of life." The greater part of the book, however, deals with the contributions made to educational thought by five leading Catholic educators: Spalding, Dupanloup, Newman, Mercier and Willman. Copious extracts from the writings of each of these men and the critical analysis of their work mark the author as one widely acquainted with Catholic educational thought and practice. Particular attention is paid to the work of Newman and Willman, and the author's sympathetic study of these two men stands out as perhaps the best part of the book. But the book in its entirety will give to the student of education a finer appreciation of the universality of Catholic principles as applied in the field of education.

It is to be regretted that the copious, if not verbose, style of expression and a certain repetitiousness in explanation mar this otherwise commendable offering to Catholic pedagogical literature. Much of the author's explanation could have been reduced considerably without in any way detracting from the completeness of the book.

ROBERT R. RAHN.

#### SANCTI AUGUSTINI DOCTRINA DE COGNITIONE

Textus Selectos Collegit et notis instruxit

Leo W. Keeler, S. J.

The Gregorian University, Rome, 1934, pp. 80, 6 lire st. Augustine speaks to us in the pages of this little book;

St. Augustine speaks to us in the pages of this little book; he himself presents his theory of cognition. This psychology which St. Augustine has developed is, according to a modern philosopher, one which has no equal in the middle ages. Fr. Keeler, in giving us the dicta of St. Augustine on cognition and all points closely related to cognition leads us deep into the Saint's philosophy,—a philosophy strong in its poetic and imaginative appeal. Our ideas, for example, are said to be copies of the Divine Ideas, and are intelligible to us because they are illuminated by God, the Sun of Eternal Truth.

All this Fr. Keeler has greatly clarified by his selection and arrangement of quotations, by his paragraph headings, and by his ample notes.

JAMES L. MCSHANE.

EDUCATIONAL PSYCHOLOGY

By William A. Kelly, Ph. D. Bruce Publ. Co., Milwaukee, 1933, \$2.40

Dr. Kelly's work might well be called Scholastic Educational Psychology or Educational Psychology With a Soul. Nowadays it is necessary to make a distinction between the psychology

of materialism and the psychology of the Scholastics. In a field of knowledge that purports to be an objective science, it is strange that fundamental facts such as the existence of a spiritual soul with the faculty of free will should be denied by the majority of writers in educational psychology.

The Scholastic tenets of rational psychology are presented by Dr. Kelly in a most simple, clear, and cogent style. Perhaps a valid criticism of the book is that the author's delving into rational psychology has been too complete for a text book in the educational applications of psychological principles. Some of the proofs of rational psychology might be taken for granted in educational psychology.

The logical development of the whole treatment of psychology is worthy of comment. For the trained teacher it is of great value, but for the average student of educational psychology it tends to create a lack of interest. Of course it is hardly fair to ask that enthusiasm for a subject be aroused by the perusal of a text book, yet the better the combination of interest and fact, the more popular and useful the text will be.

Such adverse criticisms, however, are far outbalanced by the splendid qualities of the book. Everywhere there is evidence of scholarly research into the problems which come under the scope of educational psychology. The reference bibliographies at the end of each chapter and the frequent quotations in the text itself indicate that the author has used the best possible sources for his material. The psychological works of Furfey, Barret, Gruender, Moore, and Maher, writers practically unsummer to materialistic psychologists, are quoted in part, or referred to.

Another feature of the work is the closing paragraph of each chapter. "Educational Implications" serve to bring out the connections between the findings of experimental and rational psychology and the problems of education. After all, it is at this point that psychology really becomes educational.

The questions at the end of the individual chapters should be very useful to teachers. Then, too, the objective tests, printed in the appendix of the book, ought to be helpful for the complete analysis of the problems in educational psychology.

College students and teachers alike should welcome this true view of the soul, the will, character formation, and transfer of training as well as the scientific stand taken on the remaining questions under discussion in the book. Much credit is due Dr. Kelly for his answer to the appeal of Catholic educators for a complete, concise, and fundamentally sound treatment of this important branch of education and psychology.

RAYMOND J. BISHOP.

#### THE CATHOLIC WAY IN EDUCATION

By William J. McGucken, S. J., Ph. D. Bruce Publishing Co., Milwaukee, 1934, pp. 131, \$1.50

A warrior has ridden into the lists of American education, a jouster, couching a lance proved by long pedagogical experience and using it with wholesome ruthlessness against some favorites of the day. Father McGucken, author of a previous book on Jesuit education, has gone about his new work in a businesslike manner. Eliot, a name sacrosanct in the mouths of certain modern educationists, holds no terrors for him; even the great Dewey receives this comment: "It is a point vehemently to insist upon that logic and consistency alike prohibit anyone from subscribing to Mr. Dewey's philosophy of education and at the same time professing the philosophy of life presumably held . . . by all who call themselves Christians." (p. 19) Words like these have long been due from the pens

merican Catholic educators. The author not only capably yzes and criticizes the tenets of leading educationists and issue with the "breed of educational Psychologists." he is able to put his finger on and define the nature of the couneducational ills. "We have neglected the main business ducation... the development of men and women, trained the art of thinking and the art of living." (p. 38)

nut Dr. McGucken's book is no mere hypercritical survey of rica's educational sins. As the title of his work indicates, nows how Catholicism does and should carry out its educated legislation. He quotes freely from papal encyclicals, and of all, he points the way out of the present chaotic confuwith an outline of his "ideal" plan. Chapters IV and V ng with the Catholic college and with Catholic education Utopia, U. S. A.," might well be circulated in pamphlet among the numerous Catholic parent-teacher associations. The nem he outlines a curriculum that looks modern and pracand in a fine summary says: "Catholicism is a culture, who is Catholicly educated . . . acquires a sense of an antheritage, a pride of race so to say, an attitude of noblesse ne." (p. 47)

ather McGucken's plan for the future Catholic Way in rican education calls for a judicious blending of the best ing systems. "There is no reason why this Catholic select ol—aristocratic only in the sense that selection is based on ristocracy of talent—could not take something of the thoreness and industry of the Germans, the passionate enthusiasm hings of the spirit characteristic of French schools, the fine tesy and spirit of sportsmanship of the English schools."

hrough every page of this valuable contribution to the neement of Catholic education there breathes a sense of the e superiority of the Church's legislation. There is brought to the reader the appreciation of the wonderful oneness hrist's teaching body. The author shows how it all blends the ideal of character formation and the ultimate salvation is soul. For, after all, "the key to the Catholic system is upernatural."

JOSEPH H. FICHTER.

#### THE PROBLEM OF ERROR

By Leo W. Keeler, S. J. The Gregorian University, Rome, 1934

oday Scholasticism must fight its battles in the field of cogn and must establish the epistemological foundation of its s. The fact that we can be convinced something is which the trust be reconciled with the certain possession of truth. The Problem of Error assent is studied, as it were, in isola-(perception of a nexus between subject and predicate is out e question here, for no such nexus exists). Some Scholastic ses have maintained that assent is distinct from judgment, others have opposed this view, but both assumed that tran was with them.

. Keeler prepares the way for progress in the explanation dgment and assent by his history of the problem. Despite or two deficiencies, such as the omission of Roger Bacon, his rical study has great value in bringing us into contact with thinkers by his keen analysis of their theories.

the key to the whole study seems to be St. Thomas' theory its related doctrines. Fr. Keeler's exposition will not be actory to everyone, but it brings out the essential interaction of metaphysics and a theory of cognition. In scope, is a fine piece of research, and it prepares the way for the chof the future.

JAMES L. MCSHANE.

#### A SOCIAL BASIS OF EDUCATION

Harold Saxe Tuttle

Thomas Y. Crowell Co., New York, 1934, \$3.00

To the present calamitous state of the American Educational system Professor Tuttle, a very capable and well-informed man, suggests the application of well-established principles of social psychology in education for the sake of a merely social goal. His book is a complete study of the subject, comprising much that is worthy of approval and much that is not.

The thesis of the book is: "Education can serve its social purpose only by consciously cultivating social interest and motives." He says, moreover, that every educational principle must finally be tested by its effectiveness in conserving social values. Professor Tuttle, therefore, places a goal that will never give man a clear understanding of his true nature and destiny. Like Dewey he regards him as a material entity, a mere mechanical part of a rather loosely constructed machine, labeled "Society." This is not educating man; it is rigging up an automaton. Man has a soul, and if that is disregarded, we miss the whole point of education.

Though we do not agree with some of Professor Tuttle's ideas, he, nevertheless, makes many very valuable suggestions which can be incorporated into the American system. In Part III, "Society as an Educative Agency," and Part IV, "The School as a Social Agency," the teacher will find many helpful hints in the natural motives and processes which the author proposes. The sociological phase can never be considered lightly. Teachers must employ every natural means at their disposal, in so far as they are conducive to the formation of Christian men and women. Therefore, every educational system must be tested, not only by its "effectiveness in conserving social values," but by its effectiveness in giving man a more exalted idea of his duty to God.

JOHN E. CURLEY.

#### PHILOSOPHY OF SCIENCE

By Fulton J. Sheen, Ph. D.

The Bruce Publishing Co., Milwaukee, 1934, \$2.75

We have learned to expect scholarly and readable books from the pen of Msgr. Fulton Sheen. Our expectations have not been disappointed in his contribution to the Science and Culture Series. He has produced a much needed book, valuable to the philosopher, to the scientist, and to the educated layman.

It is of value not only because it is an addition to the meagre Scholastic literature in English but also because it strikes at some of the capital errors of our day. The thesis of this book, as summed up in the first chapter (p. 2), is that the methods of science, its empirical procedure and its mathematical formulation of results, are good indeed as instruments, but that they are positively false when erected into philosophies. Now this drives full in the face of a widespread tendency among modern scien-Conceiving their mathematical science as the universal science, they convert our world into symbols, concretized formula, anything but the solid, sensible world of common sense and common-sense philosophy. In their world, as Professor Eddington says (quotation p. 27), only a symbol could live comfortably. For some of them this discrepancy of the theoretical world and the world of flesh and blood has become unbearable: they seek for freedom in a sort of Pythagorean or neo-Platonic mysticism. For the whole-hearted mathematical or empirical theorist cannot, with his starting point and on his own showing, get beyond his own science; that is to say, one cannot rise from natural science to philosophy; the higher cannot be built out of the lower. Yet, human longings and human questionings find only partial satisfaction in the lower sciences; man's mind and heart cannot rest save in the absolute of philosophy and religion. So, as an escape from this impossible situation we have the romantic mysticism of so many eminent biologists and scientists,

a mysticism that not only transcends their own scientific premises and outruns their scientific reasoning but is independent of all solid philosophic basis as well.

The origin, development, and meaning of this capital intellectual error is described through several rapid and interesting chapters (chaps. i, ii, iii).

But the error is not only pointed out; its cause is diagnosed and its cure prescribed. The scientific system of today is in disorder because its principle of union, the first science, philosophia prima, has been lost. The "Old Queen," metaphysics, has been dethroned these many years and only of late, as we find ourselves in an intellectual impasse and the old hunger for certain and absolute things comes again on man, have we begun once more to realize that metaphysics was Queen by divine right. This right of subordinating all other sciences to itself belongs to metaphysics in virtue of subject matter and of formal principles. For metaphysics studies Being, Ens inquantum Ens, joining thus in one common though analogous consideration, all things, the last creature of earth and the ultimate entity, God. No science cultivates and guards other than a province in the realm ruled by metaphysics. Formally, metaphysics searches out the deepest meaning of things-their meaning as modes of Being-and the primary principles that arise from this meaning. These are the principles which bind all human science into a hierarchical unity. On them, every science depends for validity, and, what is of more importance perhaps, without them we are chained to the limitation of sense, that is, to empiricism and emotional mysticism; we are locked in the world and barred from the absolute.

All this Msgr. Sheen ably expounds throughout the last half of his work. In the last chapter, he draws an important corollary, which is confirmed moreover by the witness of history. Religion and philosophy are fundamentally independent of natural science. If they allow themselves to be modified year after year to fit the mutations of scientific theory, and the fads of scientists, they will be stripped of their true character and rendered ephemeral and worthless. The "flowing" philosophies of today will pass when the evolutionistic cast of mind-formed to an exaggerated biological mold—passes; those parts of Scholasticism that became intimately entangled in the science of the middle ages have crumbled. Scholastic theology and metaphysics are still vital; they were independent of the four elements. This is the witness of history; and yet, the very men who never tire of deriding the medieval theologian for his quaint conceptions in science, deride the modern theologian and philosopher if he fails to measure his eternal verities by the Protean yardstick of empirical science and mathematical theorizing.

Despite the excellence of its subject matter and the lucidity of its style, the Philosophy of Science is, however, by no means final and faultless. It is, in the opinion of this reviewer, much rather an outline of work to be done. Indeed, it is perhaps a defect that Msgr. Sheen should have attempted in so small a compass to state and solve a problem, so broad and so universally misunderstood. He has attempted in some two hundred pages no less than a vindication of metaphysics and its reinstatement in a scientific world which has largely forgotten or ignored it. It is too much. Many important things have been sketchily and, therefore, less successfully treated. For example, abstraction, in all its meanings and misunderstandings, cannot be easily explained. Msgr. Sheen, it seems, leaves much to be desired here; the peculiar and ill-defined abstraction that results in Ens, the abstraction that is the work of the intellectus agens, the abstraction that results in genera and species, have not been clearly distinguished. Likewise, the difficult problem of sense knowledge-a vital point in cognition-cannot be dismissed with a word. Scholastics in general have not, it seems, faced this problem fairly and squarely; it is not merely a matter of terminology, as some seem to think; it is a complex difficulty against the validity of knowledge, and until some one deals with it thoroughly

in the spirit of the philosophia perennis, the Scholastic will hat least one vulnerable spot for modern opponents.

The style of the book involves an attitude common to Scho tic writers, valuable in many ways, but detrimental, in our or ion, to the effectiveness of their polemic. The Scholastic, perh because of an unbalanced diet of reading, tends to speak like of his own textbooks-and many of them are mediocre enough he will outline Descartes in half a page, sum up Kant in the headings and refute Plato in a footnote; he will lay down c nitions and outline theses as impersonally as a Senatorial reso tion—and as stiffly. Now, no doubt there is excuse for this the precision of Scholastic terminology, and in the commun which every Scholastic feels with his fellow philosophers of o countries and other centuries. Yet, no philosophy can be ti grasped, profoundly realized save by personal re-thinking re-realizing. Only so grasped and so realized will it carry we when propounded. Scholastic philosophy will be dead, ur it be personally assimilated, and unless its value be appreciated reference to personal questioning and personal needs. Then c can a man write.

It must be remarked in justice that this fault is not so I nounced in the work of Fulton Sheen; yet, there is a touch o and, combined with a tendency to treat certain large proble a bit hastily, it detracts decidedly from an otherwise fine piece work. For, in this application of Scholastic principles to a difficulty in modern thought Msgr. Sheen has done more think out an individual problem. He has also lent the impof example to the neo-Scholastic movement in America, a mement, as yet entirely too restricted and too inactive. Scholasmust come to grips, as Fulton Sheen has, with the question of intelligent men today; we must bring forth the old and the new, we must build up a living philosophy.

ROBERT J. HENLE